

In the Specification

Please replace the paragraph beginning on page 14, line 14 with the following amended paragraph:

To fuse MSP1-42 to the 15 amino acid β -casein signal peptide, a pair of oligos, MSP203 and MSP204 (MSP203: ggccgctgcagcaccatgaaggtcctcataattgcc tgctgtggtgctctggccattgcagcgcgtcactccctccgtcat, SEQ ID NO: 12; MSP204: cgatgacggaggagtgacggctcaatggccagagccaccagacaggcaattatgaggaccttcattggtggcgtcgagc, SEQ ID NO: 13); which encode the 15 amino acid-casein signal and the first 5 amino acid of the MSP1-42 ending at the Cla I site, was ligated with a Cla I-Xho I fragment of BC620 (Fig. 8) which encodes the rest of the MSP1-42 gene, into the Xho I site of the expression vector pCDNA3. A Xho I fragment of this plasmid (GTC669) was then cloned into the Xho I site of milk specific expression vector BC350 to generate B670 (Fig. 9)

Please replace the paragraph beginning on page 14, line 25 with the following amended paragraph:

A Sal I-Not I fragment was prepared from plasmid BC670 and microinjected into the mouse embryo to generate transgenic mice. Transgenic mice was identified by extracting mouse DNA from tail biopsy followed by PCR analysis using oligos GTC17 and MSP101 (sequences of oligos: GTC17, GATTGACAAGTAATACGCTGTTTCCTC, SEQ ID NO: 14; Oligo MSP101, GGATTCAATAGATACGG, SEQ ID NO: 15). Milk from the female founder transgenic mice was collected at day 7 and day 9 of lactation, and subjected to western analysis to determine the expression level of MSP-1-42 using an polyclonal anti-MSP antibody and monoclonal anti MSP antibody 5.2 (Dr. David Kaslow, NIH). Results indicated that the level of MSP-1-42 expression in the milk of transgenic mice was at 1-2 mg/ml (Fig. 10).

Please replace the paragraph beginning on page 15, line 12 with the following amended paragraph:

To introduce N262-Q mutation, a pair of oligos, MSPGYLYCO-3 (CAGGGAATGCTGCAGATCAGC, [SEQ ID NO: 16](#)) AND MSP42-2 (AATTCTCGAGTTAGTGGTGGTGGTGGTGGTATCGCAGAAAATACCATG, [SEQ ID NO: 17](#); FIG. 11), were used to PCR amplify plasmid GTC627, which contains the synthetic MSP1-42 gene. The PCR product was cloned into pCR2.1 vector (Invitrogen). This generated plasmid GTC716.

Please replace the paragraph beginning on page 15, line 18 with the following amended paragraph:

To introduce N181-Q mutation, oligos MSPGLYCO-1 (CTCCTTGTCAGG AACTGTAGGG, [SEQ ID NO: 18](#)) and MSPGLCO-2 (GTCTGCAGTACACATATGAG, [SEQ ID NO: 19](#); Fig 4) were used to amplify plasmid GTC 627. The PCR product was cloned into pCR2.1. This generated plasmid GTC700.